

Community Profile

City of Dexter

**Dallas County
Hazard Mitigation Plan 2023**

Local Planning Team

Table DEX.1: Dexter Local Planning Team

Name	Title	Jurisdiction
Dave Venema	Mayor	City of Dexter
Brad Vry	Fire Chief	City of Dexter
Eli Canfield	Public Works	City of Dexter

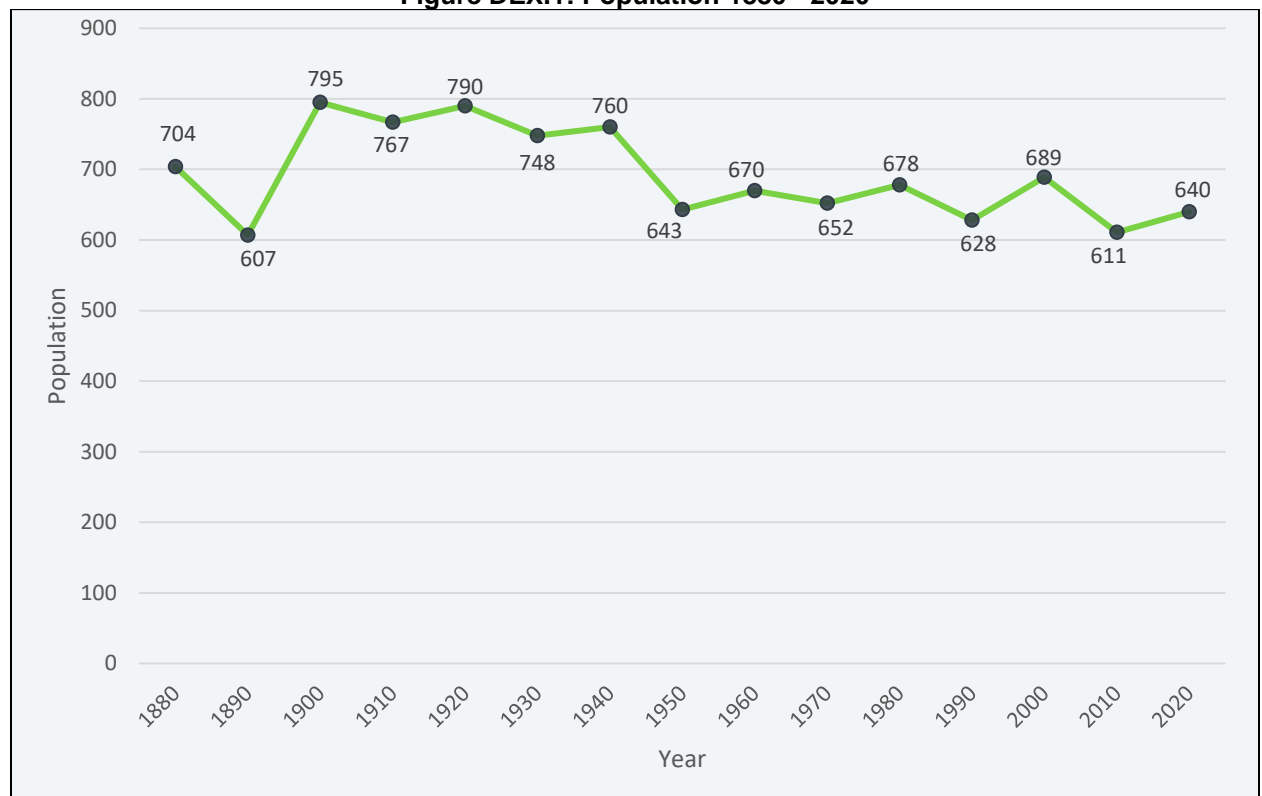
Location and Geography

The City of Dexter is located in southwest Dallas County and covers an area of 1.25 square miles. Waterways in the area include Jim Creek and Long Branch.

Demographics

Dexter’s population in 2020 was 640. The following figure displays the historical population trend from 1880 to 2020. This figure indicates that the population of Dexter has generally fluctuated from 1880 to 2020. However, the city saw an increase in population over the past decade. Increasing populations are associated with increased hazard mitigation and emergency planning requirements for development. Increasing populations can also contribute to increasing tax revenues, allowing communities to pursue additional mitigation projects. Dexter population accounted for 0.6% of Dallas County’s population in 2020.¹

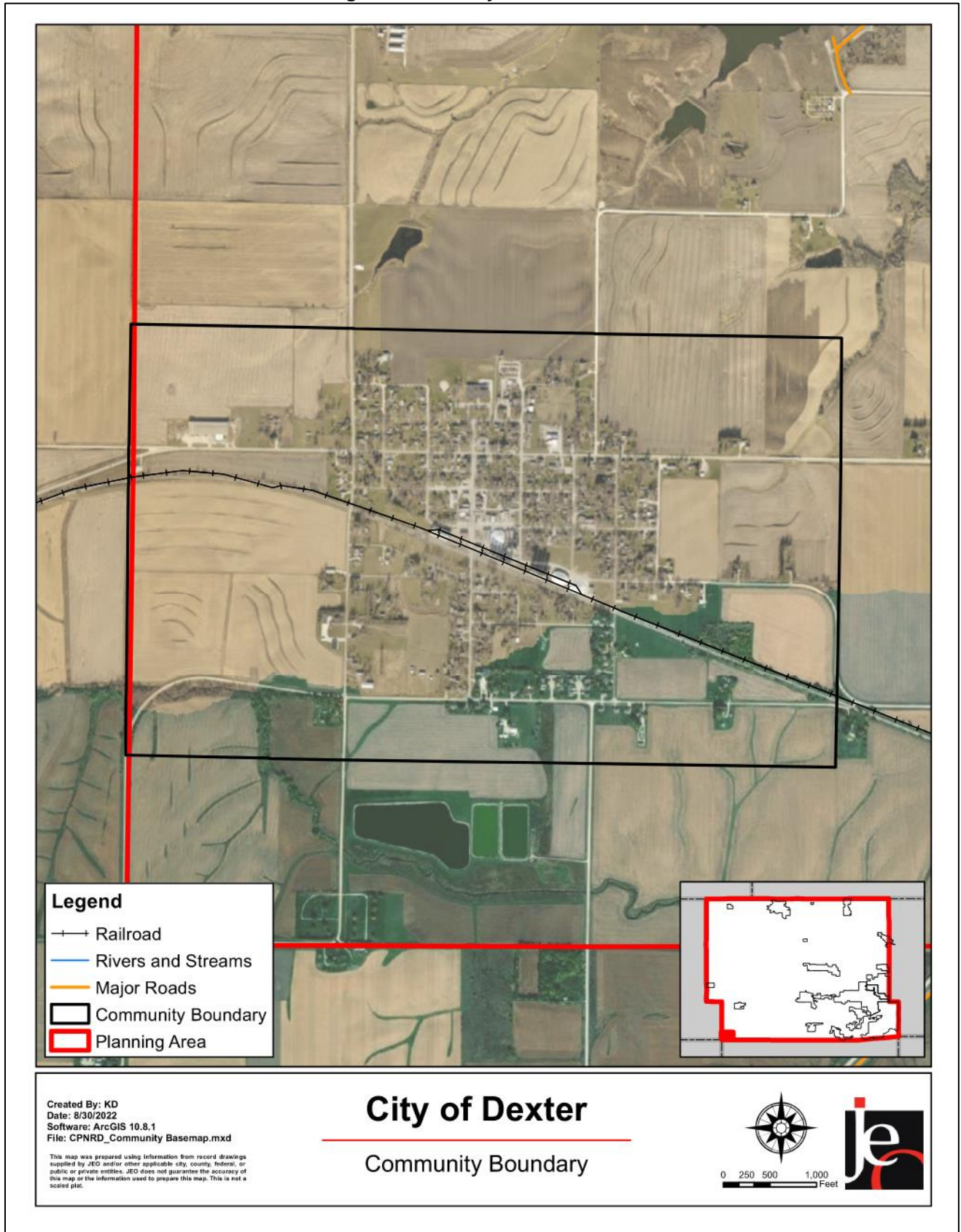
Figure DEX.1: Population 1880 - 2020



Source: U.S. Census Bureau

¹ United States Census Bureau. “2020 Census Redistricting Data (Public Law 94-171): P1: Race.” <https://data.census.gov>.

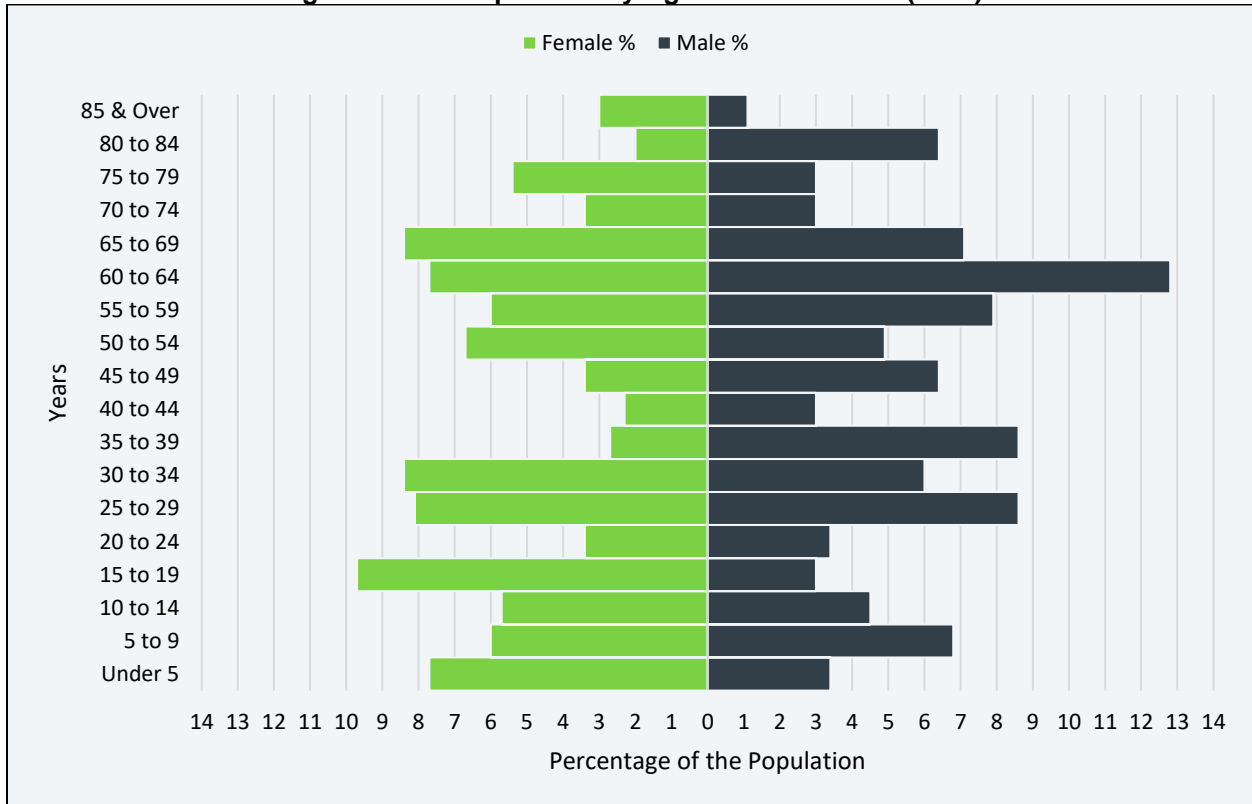
Figure DEX.2: City of Dexter



The young, elderly, and minority populations may be more vulnerable to certain hazards than other groups. Looking at Dexter’s population:

- **5.9% is non-white.** Since 2010, Dexter became more racially diverse. In 2010, 1.5% of the Dexter’s population was non-white. By 2020, 5.9% was non-white.^{2 3}
- **41.8 median age.** The median age of Dexter was 41.8 years old in 2020. The population grew older since 2010, when the median age was 38.5.^{4 5}

Figure DEX.3: Population by Age Cohort and Sex (2020)



Source: U.S. Census Bureau⁴

The figure above shows Dexter’s population percentage broken down by sex and five-year age groups. Dexter’s population is relatively stable with most of the population spread out between different age groups. This indicates that the population is likely to remain stable in the future.

Employment and Economics

Low-income populations, long distance commuters, and the unemployed may be more vulnerable to certain hazards than other groups. Dexter’s population has:

² United States Census Bureau. “2020 Census Redistricting Data (Public Law 94-171): P1: Race.” <https://data.census.gov>.

³ United States Census Bureau. “2010 Census Redistricting Data (Public Law 94-171): P1: Race.” <https://data.census.gov>.

⁴ United States Census Bureau. “2020 Census Bureau American Community Survey: S0101: Age and Sex.” <https://data.census.gov>.

⁵ United States Census Bureau. “2010 Census Bureau American Community Survey: S0101: Age and Sex.” <https://data.census.gov>.

- **7% of people living below the poverty line.** The poverty rate (7%) in Dexter was lower than the state’s poverty rate (11.1%) in 2020.⁶
- **\$58,125 median household income.** Dexter’s median household income in 2020 (\$58,125) was about \$3,700 lower than the state (\$61,836).⁷
- **2.1% unemployment rate.** In 2020 Dexter had a lower unemployment rate (2.1%) compared to the state (3.9%).⁸
- **59.3% of workers commuted 30 minutes or more to work.** More workers in Dexter commuted 30 minutes or more to work than workers commuting less than 15 minutes (59.3% compared to 24.5%).⁹

Major Employers

Major employers for the city include Heartland Co-op, West Central Valley School, Midwest Trencher, the Rusty Duck, Casey’s, and the United States Postal Service. According to the local planning team, a large percentage of residents commute to other communities for work, such as Des Moines and West Des Moines.

Housing

The age of housing may indicate which housing units were built prior to the development of state building codes. Vacant housing stock may also be more vulnerable to hazard events if it is poorly maintained. Unoccupied housing may also suggest that future development may be less likely to occur. Communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe thunderstorms if those homes are not anchored correctly. Renter-occupied housing depends on the initiative of landlords for proper maintenance and retrofitting to be resilient to disasters. They are less likely than homeowners to have flood insurance, or to know their risks to flooding and other hazards.

- **69.7% of housing built prior to 1970.** Dexter has a greater share of housing built prior to 1970 than the state (69.7% compared to 50.4%).¹⁰
- **6% of housing units vacant.** Since 2010, Dexter’s vacancy rate decreased. In 2010 the vacancy rate was 9.6%. By 2020, 6% of housing units were vacant.^{11 12}
- **6% mobile and manufactured housing.** The City of Dexter had a greater share of mobile and manufactured housing (6%) compared to the state (3.6%).¹³

⁶ United States Census Bureau. “2020 Census Bureau American Community Survey: DP03: Selected Economic Characteristics.” <https://data.census.gov>.

⁷ United States Census Bureau. “2020 Census Bureau American Community Survey: DP03: Selected Economic Characteristics.” <https://data.census.gov>.

⁸ United States Census Bureau. “2020 Census Bureau American Community Survey: DP03: Selected Economic Characteristics.” <https://data.census.gov>.

⁹ United States Census Bureau. “2020 Census Bureau American Community Survey: S0802: Means of Transportation to Work by Selected Characteristics.” <https://data.census.gov>.

¹⁰ United States Census Bureau. “2020 Census Bureau American Community Survey: DP04: Selected Housing Characteristics.” <https://data.census.gov>.

¹¹ United States Census Bureau. “2020 Census Bureau American Community Survey: DP04: Selected Housing Characteristics.” <https://data.census.gov>.

¹² United States Census Bureau. “2010 Census Bureau American Community Survey: DP04: Selected Housing Characteristics.” <https://data.census.gov>.

¹³ United States Census Bureau. “2020 Census Bureau American Community Survey: DP04: Selected Housing Characteristics.” <https://data.census.gov>.

Section Seven: City of Dexter Community Profile

- **21% renter-occupied.** The rental rate of Dexter was 21% in 2020. The percentage increased since 2010, when renter occupied housing was at 12.9%.^{14 15}

Governance

A community’s governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Dexter has a mayor, a five-member city council, and the following offices.

- Clerk/Treasurer
- Attorney
- Fire Chief
- Wastewater Plant Superintendent
- Water/Sewer Superintendent
- Solid Waste Superintendent
- Street Superintendent
- City Inspector
- SWIPCO
- SICOG
- Library Board Chairperson
- Parks Superintendent
- GIS/Zoning Administrator

Capability Assessment

The capability assessment consisted of a Capability Assessment Survey completed by the jurisdiction and a review of local existing policies, regulations, plans, and the programs. The survey is used to gather information regarding the jurisdiction’s planning and regulatory capability; administrative and technical capability; fiscal capability; and educational and outreach capability.

Table DEX.2: Capability Assessment

Survey Components/Subcomponents		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	Yes
	Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	No
	Building Codes	Yes

¹⁴ United States Census Bureau. “2020 Census Bureau American Community Survey: DP04: Selected Housing Characteristics.” <https://data.census.gov>.

¹⁵ United States Census Bureau. “2010 Census Bureau American Community Survey: DP04: Selected Housing Characteristics.” <https://data.census.gov>.

Section Seven: City of Dexter Community Profile

Survey Components/Subcomponents		Yes/No
	National Flood Insurance Program	No
	Community Rating System	No
	Other (if any)	
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administration	No
	GIS Capabilities	No
	Chief Building Official	Yes
	Civil Engineering	Yes
	Local Staff Who Can Assess Community's Vulnerability to Hazards	Yes
	Grant Manager	Yes
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	Capital Improvement Plan/ 1 & 6 Year Plan	No
	Applied for grants in the past	Yes
	Awarded a grant in the past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric Service Fees	Yes
	Storm Water Service Fees	Yes
	Water/Sewer Service Fees	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
Other (if any)		
Education & Outreach Capability	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access, and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc.	No
	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes
	Natural Disaster or Safety related school programs	Yes
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Table DEX.3: Overall Capability

Overall Capability	Limited/Moderate/High
Financial resources needed to implement mitigation projects	Limited
Staff/expertise to implement projects	Limited
Community support to implement projects	Limited
Time to devote to hazard mitigation	Limited

Plan Integration

Dexter has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan. The city will seek out and evaluate any opportunities to integrate the results of the current hazard mitigation plan into other planning mechanisms and updates.

Funding and Grants

The City of Dexter’s municipal funds are limited to maintaining current facilities and municipal systems. There are currently no large projects planned for within the city’s funds. Municipal funds have increased over recent years. In the last five years the city has applied for several grants, including ones for safety signs, weather sirens, and the DMACC Water Environmental Technology (WET) program. The city was awarded a DMACC WET grant.

Building Codes

The building code sets standards for constructed buildings and structures. These codes regulate and govern the conditions and maintenance of all property, buildings, and structures by providing the standards for supplied utilities, facilities, and other physical things and conditions essential to ensure that structures are safe, sanitary, and fit for occupation and use.

Capital Improvement Plan

The capital improvement plan outlines large purchases and projects that the city would like to pursue. Projects identified in the plan include improving transportation routes for drainage, installing water meters for residential structures, constructing a new fire hall, improving the existing water treatment facility, and improving other existing community owned structures. The city plans to update the plan in the coming years and hopes to include upsizing water distribution pipes, installing emergency generators in critical facilities, and constructing a new police headquarters in the future update.

Zoning Ordinance and Subdivision Regulations

The city currently has a Zoning Ordinance in place that includes well setback requirements and allows the city the ability to implement water restrictions. The ordinances do not discourage development along major transportation routes. The city’s subdivision regulations do not allow density transfers in hazard areas nor do they restrict subdivision of land within or adjacent to the floodplain.

Water System Emergency Response Plan

Water system emergency response plans ensure the drinking water systems that serve the City of Dexter are prepared to supply customers with drinking water in the event of an emergency. It includes identifying potential emergencies and how the utility will ensure water delivery in specific scenarios.

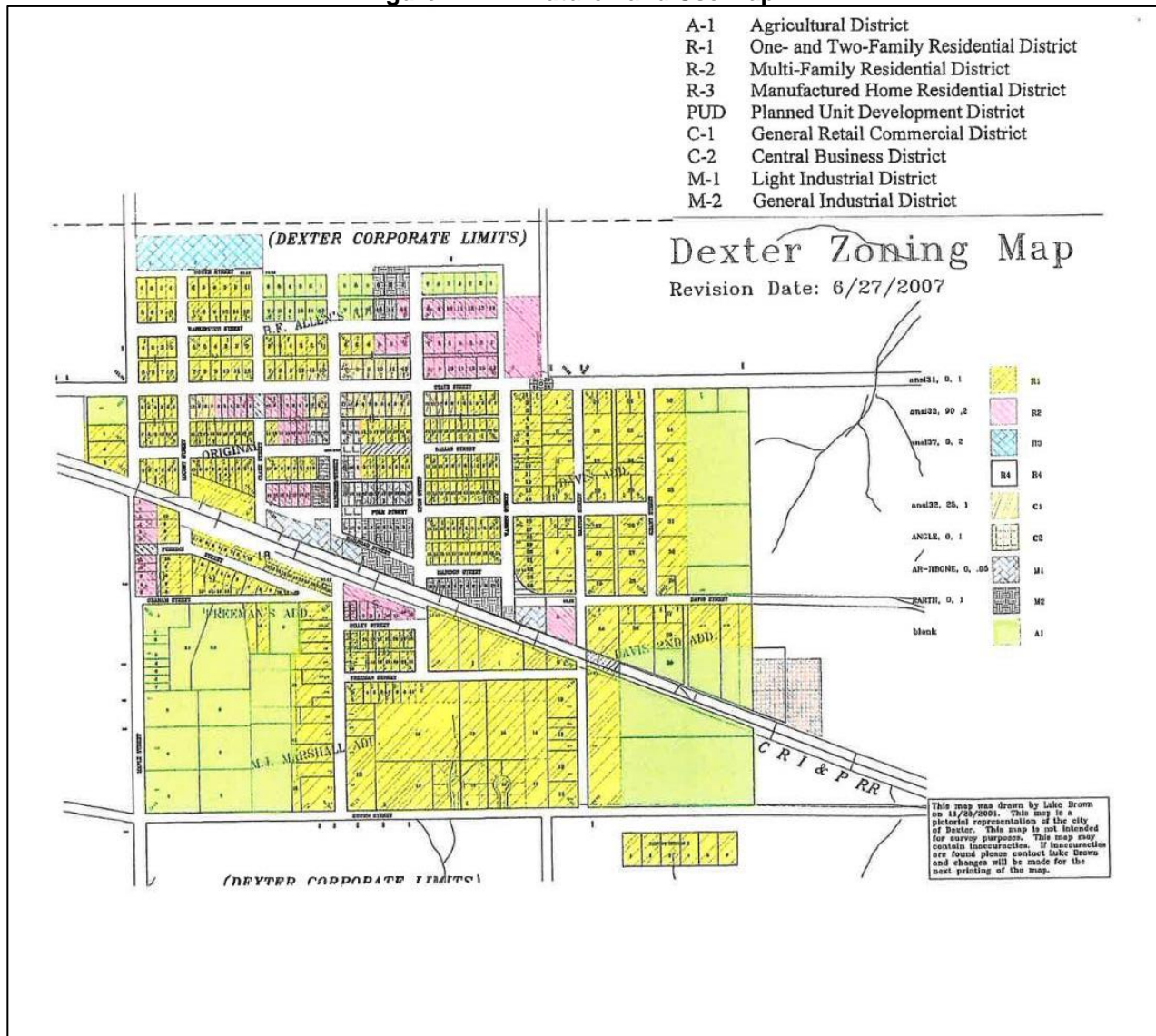
Wellhead Protection Plan

The purpose of wellhead protection plans is to protect the public drinking water supply wells from contamination. It includes identifying potential sources of groundwater contamination in the area.

Future Development Trends

In the last five years, there have been three houses demolished and two new houses built in the city. The city has resurfaced various roads as well. Currently there are no new housing developments or new businesses planned for the next five years. A future land use map for the city can be seen in the following figure

Figure DEX.4: Future Land Use Map



Community Lifelines

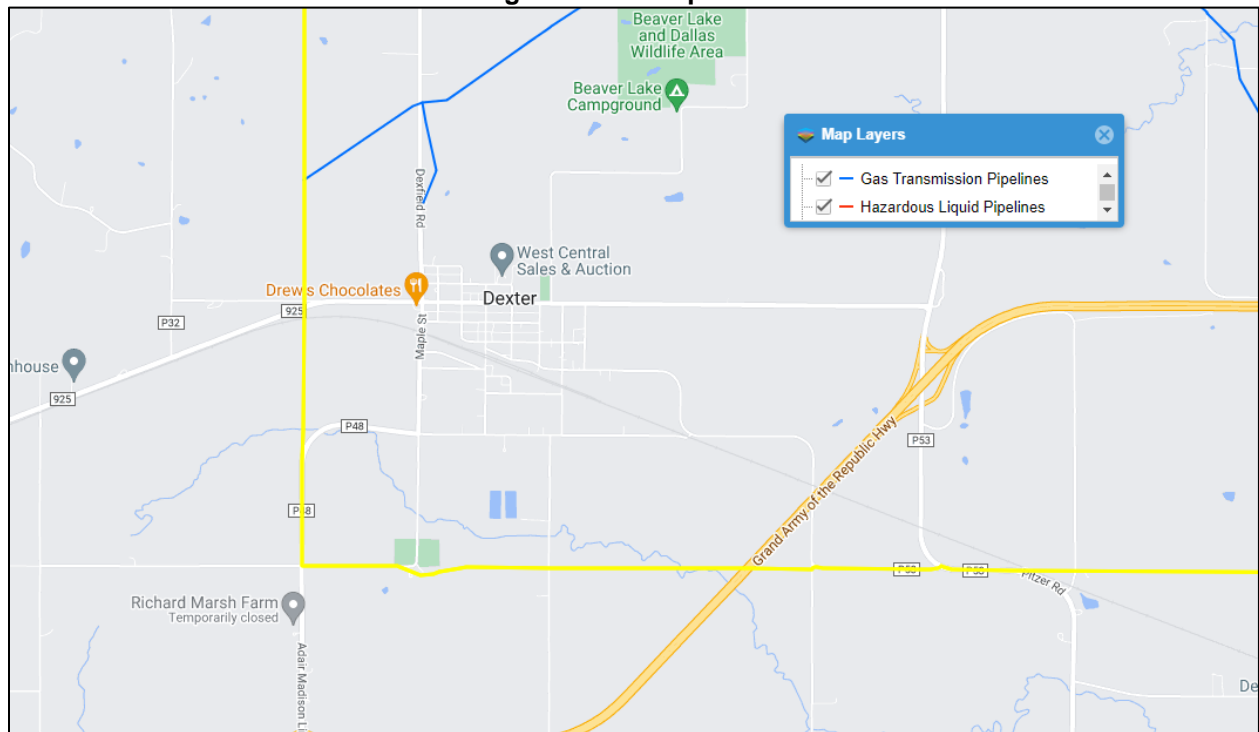
Transportation

Dexter’s major transportation corridors include County Highway P48 and County Highway F65. Interstate 80 also runs near the city. Highway P48 has an average of 320 vehicles. Highway F65 has a daily average of 2,580 vehicles.¹⁶ Dexter has one rail line, the Iowa Interstate Railroad, which travels through the community. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community, as well as areas more at risk of transportation incidents. This fire station is the only critical facility located along the city’s main transportation routes. Dexter has agricultural chemicals regularly transported along local routes with none of the chemicals spilling locally to date. If a multi-vehicle pileup occurs on the interstate, the detour route brings a high flow of vehicles through Dexter.

Hazardous Materials

There are gas transmission pipelines that travel near the city and can be seen as blue lines in the figure below.

Figure DEX.5: Pipelines



Source: National Pipeline Mapping System¹⁷

¹⁶ Iowa Department of Transportation. 2016. "Iowa Traffic Data". Accessed May 2022.

<https://iowadot.maps.arcgis.com/apps/MapSeries/index.html?appid=0cce99afb78e4d3b9b24f8263717f910>.

¹⁷ National Pipeline Mapping System. 2022. "Public Viewer." Accessed April 2022. <https://pvnpm.phmsa.dot.gov/PublicViewer/>.

According to the Tier II System reports submitted to the Iowa Department of Natural Resources, there is one chemical storage site in Dexter that contains hazardous chemicals. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident.

Table DEX.4: Chemical Storage Sites

Facility Name	Address	Located in Floodplain?
MidAmerican Energy - Arbor Hill Substation	1259 York Ave, Dexter, IA 50070	No
Casey's	803 State St, Dexter, IA 50070	No
Midwest Trenchers	375 State St, Dexter, IA 50070	No

Source: Iowa Department of Natural Resources¹⁸

Health and Medical Facilities

According to the Iowa Department of Inspection and Appeals, there are no medical and health facilities located within the community.

Critical Facilities

The local planning team identified critical facilities that are vital for disaster response, public shelter, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update. The following table and figure provide a summary of the critical facilities for the jurisdiction.

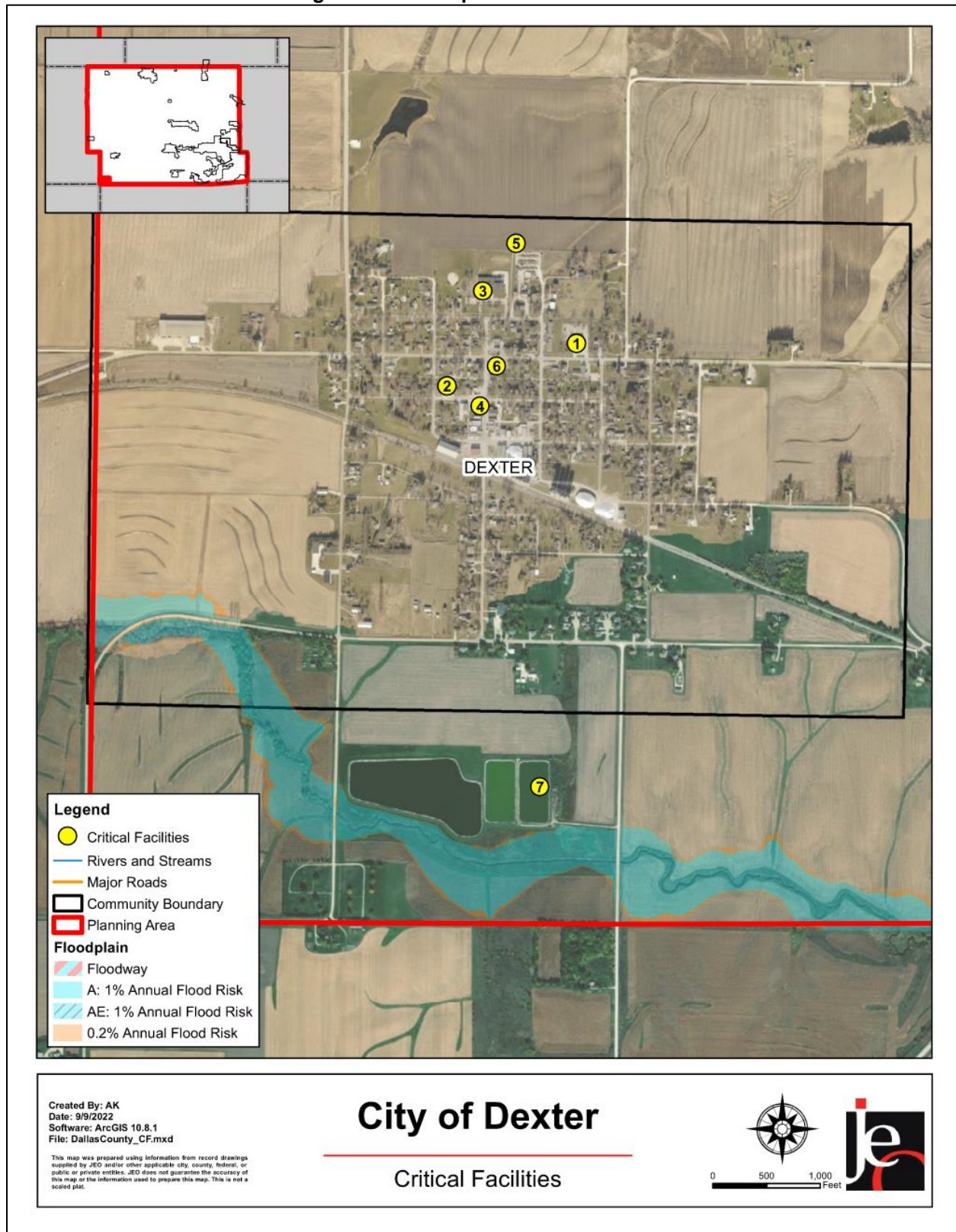
Table DEX.5: Critical Facilities

CF #	Name	Mass Care (Y/N)	Generator (Y/N)	Floodplain (Y/N)
1	Dexter City Hall	N	N	N
	Dexter Fire Department	N	Y	N
2	Roundhouse	Y	N	N
3	Dexter Elementary School	Y	N	N
4	Dexter Library	N	N	N
5	Water Supply Standpipe	N	N	N
6	Water Tower	N	N	N
	Jordan Well #1	N	N	N
7	Lagoon	N	N	N
8*	Dexter Water Treatment	N	N	N

*Treatment plant is not mapped but is located south of Redfield.

¹⁸ Iowa Department of Natural Resources. 2022. "Emergency Response - Tier II Chemical Storage." Accessed April 2022. <https://facilityexplorer.iowadnr.gov/facilityexplorer/>.

Figure DEX.6: Map of Critical Facilities



Parcel Improvements and Valuation

The planning team requested GIS parcel data from the County Assessor as of July 2022. This data allowed the planning team to analyze the location, number, and value of property improvements at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

Table DEX.6: Dexter Parcel Improvements and Value in the 1% Annual Flood Risk Area

Total Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	% of Improvements in Floodplain
353	\$43,841,680	2	\$158,570	1%

Source: County Assessor, 2022

Table DEX.7: Dexter Parcel Improvements and Value in the 0.2% Annual Flood Risk Area

Total Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	% of Improvements in Floodplain
353	\$43,841,680	2	\$158,570	1%

Source: County Assessor, 2022

Table DEX.8: Dexter Flood Map Products

Type of Product	Product ID	Effective Date	Details
FIS Report	19049CV000B	12/7/2018	Flood Insurance Study

Source: FEMA Flood Map Service Center¹⁹

¹⁹ Federal Emergency Management Agency. 2022. "FEMA Flood Map Service Center." Accessed July 2022. <https://msc.fema.gov/portal/advanceSearch>.

Hazard Prioritization

The hazards discussed in detail below were selected by the local planning team from the county hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities. For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment*.

Animal and Plant Disease

The destruction of the Emerald Ash Borer has heavily impacted the City of Dexter's ash tree populations. The dead ash trees become hazardous as they weaken and fall. In 2021, the city had an ash tree fall over the highway. Before it could be removed, a car crashed into it at highway speeds. The local planning team's top concern is more dead trees falling and causing injuries and fatalities, power outages, and more traffic incidents. To reduce the risk of these concern, the city has started removing infected Ash trees throughout the city.

Infrastructure Failure

The local planning team is concerned about infrastructure failure impacting the city water system, resulting in the loss of adequate water supply. The city has experienced past events of well or water plant failures that have caused the city to activate the emergency water supply. The emergency water supply is not intended for long term activation, which raises concerns of the local planning team. The city is currently updating the water system and water alarm system to reduce the risk of infrastructure failure.

Severe Winter Storms

Severe winter storms are a regular part of the climate and weather for Dexter. Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. According to the NCEI, there were 79 winter storm events in Dallas County from 1996 to 2021. These events resulted in \$6,613,680 in property damages, with no injuries or deaths reported. Additionally, the USDA Risk Management Agency reported almost \$375,000 in crop damages from severe winter storm events from 2000 to 2021. The local planning team reports past occurrences of excess snowfall blocking emergency routes and ice storms causing power failure in the city.

The top concern identified by the local planning team was the safety of residents' lives during a storm. To reduce risk and impacts to this hazard, the city has hired additional part time public works employees for snow removal and uses snow fences on the east side of town along the northern sides of State Street and Davis Street and in the western portion of town along the west side of Marshall Street. The city has entered into mutual aid agreements for interstate incidents and approximately 40-50% of powerlines within the city are buried. For future reduction of risk, the local planning team would like to install backup generators, improve tree removal, and increase Fire and EMS staffing and training for traffic incidents. The city's snow removal resources are reported as being sufficient.

Tornado and Windstorm

The local planning team identified tornado and windstorm as a top hazard due to their prevalence in the area and potential for damage and loss of life. Windstorms are common across the county and can cause property and tree damage and brief power outages. Tornadoes are much less common, but the impacts can be far greater. Between 1996 and 2021, the NCEI recorded 31 high wind events in Dallas County and one tornado in Dexter. The brief tornado event occurred in May 2004 with an EF0 tornado only briefly touching down in open fields. No injuries or other damages were reported. Derechos in 2020 impacted the community and caused power outages, uprooted trees, and damaged structures. The local planning team's top concerns for this hazard included infrastructure failure, power outages, mass destruction, and even the potential for fatalities.

To minimize the effects of tornadoes and windstorms, the city has had members of the fire department attend storm spotter trainings for early alert activations. The city is looking to continuing the training and implement a strong back up power supply.

Transportation Incident

This hazard was identified as a top hazard due to the city's proximity to Interstate 80 that partially runs along the southern border of the city. The city has experienced multiple past motor vehicle collisions resulting in injuries and fatalities. The top concerns noted by the local planning team are those of fatalities, injuries, hazardous material spills resulting in environmental impacts, and secondary incidents. In a major incident, loss of life, environmental damage, hazardous releases, or economic disruption could impact the city.

To help reduce the risk of transportation incidents, the city is working to implement a four way stop at a main intersection to help reduce collisions. Speed limits in town are being reduced and the fire department has attended extraction trainings. In the future, the city plans to increase local EMS staffing as well.

Mitigation Strategy

Completed Mitigation and Strategic Actions

Mitigation Action	Safe Rooms/Storm Shelters
Description	Designate emergency safe buildings for residents in the event of a tornado, windstorm, or other hazard event. Supply water and first aid materials.
Hazard(s)	All Hazards
Estimated Cost	<\$10,000
Funding	City General Fund
Timeline	1 year
Priority	Low
Lead Agency	Fire Department
Status	Completed

Mitigation Action	Water Storage
Description	Construct additional in-ground water tower/storage
Hazard(s)	All hazards
Estimated Cost	\$1,000,000+
Funding	City General Fund
Timeline	3-5 years
Priority	Low
Lead Agency	Public Works Department
Status	Completed

Continued Mitigation and Strategic Actions

Mitigation Action	Backup Generators
Description	Install Emergency Generators at Water Treatment Plant and Standpipe Pump
Hazard(s)	All hazards
Estimated Cost	\$7,000 per generator
Funding	City General Fund, HMA
Timeline	2 years
Priority	Low
Lead Agency	Water Superintendent
Status	Project is in progress

Mitigation Action	Hazardous Tree Removal
Description	Identify and remove hazardous limbs and/or trees. Contact Mid America or a combination of contracting tree services.
Hazard(s)	All hazards
Estimated Cost	<\$10,000
Funding	In-Kind (Donated)
Timeline	1-3 years
Priority	Medium
Lead Agency	City Superintendent
Status	Not started

Mitigation Action	Public Awareness and Education
Description	Additional public information is needed to ensure citizens know what to do to prepare for and respond to emergencies/disasters. Fire Department will prepare posters and educational materials.
Hazard(s)	All hazards
Estimated Cost	Staff Time
Funding	City General Fund
Timeline	1 year
Priority	Low
Lead Agency	Fire Department
Status	Not started

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (e.g., annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to other funding opportunity cycles begin, including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms.

The local planning team is responsible for reviewing and updating this community profile as changes occur or after a major event. The local planning team will include the Mayor, Fire Chief, and a member of the City Council. The plan will be reviewed annually. The public will be included in the review and revision process via board council meetings and website updates.